

REMARKS/ARGUMENTS

Claims 1-3 are canceled.

Claims 4-5 are new.

Support for each new claim is found at the originally filed claims and throughout the specification.

Upon entry of the amendment, Claims 4-5 will be active.

No new matter is believed to have been added.

All rejections of Claims 1-3 are obviated by cancellation of Claims 1-3.

Claims 4 and 5 have been drafted to exclude the word “including.”

Additionally, Applicants respectfully submit Claims 4 and 5 are not anticipated by, or obvious in view of Drenski, because the claims recite a limitation not found in or suggested by Drenski, that the catalyst comprises a bulk composition and a surface composition, wherein the Mo/Si atomic ratio in the bulk composition of the catalyst, expressed as A, and the Mo/Si atomic ratio in the surface composition of the catalyst, expressed as B, have a relationship such that B/A is not greater than 0.6. Applicants submit that Drenski does not inherently contain this limitation, because the processes for making the present catalysts and the catalyst of Drenski are different. Additionally, Drenski does not describe or suggest the superior result, described at page 2, lines 12-13, of maintaining the acrylonitrile yield at a high level for a long time by employing the presently claimed catalysts.

The present catalysts have a bulk Mo/Si ratio and a surface Mo/Si ratio. The Mo/Si ratio in the bulk composition of the catalysts is almost the same as the composition of charged catalyst raw materials. However, the Mo/Si atomic ratio in the surface composition of the catalyst does not depend upon the composition of the charged catalyst raw materials, but the rather varies greatly according the catalyst preparation conditions.

The present catalysts preparation conditions are different from Drenski, and these different methods of preparing the present catalysts result in the presently claimed catalysts being different from Drenski.

For example, page 5, lines 1-3, describe that the liquid temperature when preparing the aqueous slurry is preferably not greater than 60°C. Additionally, page 5, lines 5-8, describe that it is preferable not to provide heat treatment to the prepared slurry. Further, page 8, line 18, describes that it is preferable to use colloidal silica (silica gel) in the slurry. Moreover, page 5, lines 19-21, describe that the size of the colloidal particle is preferably 2 to 100 nm. Finally, page 5, lines 23-25, describes that the amount of water in the aqueous slurry is chosen to make the solid content of the slurry 10 to 40 wt%. None of these catalyst preparation limitations are described or suggested by Drenski.

Further, page 7, lines 17-20, describes that a spray dryer is preferably used to dry the slurry. Page 8, lines 6-8, additionally describes that it is desirable to keep the difference between the temperature near the inlet and the temperature near the outlet of the dryer in a range of from 20 to 60 °C. This later drying limitation is very important, because this temperature difference range, when combined with the other previously described limitations, results in the presently claimed catalysts.

Applicants submit that a person of ordinary skill in the art would make the difference between the temperature near the inlet and the temperature near the outlet of the dryer as large as possible (100°C or larger) to improve the production efficiency of the catalyst (i.e., to dry the slurry faster). Thus, keeping the spray drying difference between the temperature near the inlet and the temperature near the outlet of the dryer within a range of 20 to 60°C would not be obvious to a person of ordinary skill in the art. This observation is further reinforced via Drenski, because Drenski describes at column 4, lines 15-17, that the inlet

temperature of the sprayer dryer was 325°C, and the outlet of temperature of the sprayer dryer was 145°C, for a temperature difference of 180°C.

Accordingly, because Drenski does not describe or suggest limitations found in Claims 4 and 5, because the present catalysts are made from a different process than Drenski, and because Drenski does not describe or suggest the advantage accruing from employing the present catalysts, of maintaining the acrylonitrile yield at a high level for a long time, Applicants respectfully submit the present catalysts are distinguished over Drenski.

Applicants submit the present application is now in condition for allowance. Early notification to this effect is earnestly solicited.

Respectfully submitted,

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